









REDUCING DIESEL EMISSIONS, PROMOTING PUBLIC HEALTH

2015 NEDC Breathe Easy Leadership Award Nomination Form

Part 1: Contact Information

Organization or Individual(s) Being Nominated:	
Title:	
Address:	_
Phone:	
Email:	-
Individual Providing Nomination:	
Address:	
Phone:	
Email:	

Part 2: Project Description

Provide a detailed narrative describing the actions taken by the nominated project and/or nominated individual(s) to advance clean diesel activities within the NEDC region. To be considered for an award, the emissions benefits must have occurred since July 2013. The narrative should be a **maximum of 2 pages** and include the following:

- Describe project location, timeline and costs
- Describe actions taken to reduce diesel emissions
- Describe business benefits and/or leverage associated with the project
- Describe how the project serves as a model for others to follow
- Describe how actions can be continued and sustained
- If applicable, list project partners and describe the partnership or collaborative effort
- If applicable, include quantified emission reductions (e.g., PM, HC, NOx, CO, fuel conserved)
- If applicable, include a qualitative description of the approach to outreach and collaboration

Part 3: Additional Information (optional)

You may include any relevant information, pictures or graphics associated with the nominated project. Note: If the nominee is involved in an active environmental enforcement action (federal or state), this must be disclosed.

Fill out this form, attach your narrative and submit to Gary Rennie at rennie.gary@epa.gov

• Describe project location, timeline and costs

Local Law 77 was enacted into law on December 22, 2003, but was not effective citywide until 2005. The purpose is to reduce the emission of diesel particulates into the air from city-owned, leased or contracted off-road construction sources. This historic piece of legislation will help reduce respiratory illnesses associated with particulate matter and nitrogen oxides.

This law also required that the Commissioner of the NYC Department of Environmental Protection to make determinations as to which emissions control devices constitute the best available technology to reduce these harmful pollutants. The rule is reviewed every six months to ensure that the best possible technology is identified in order to effectuate the intent of the law. DEP published a rule that identifies devices that have the maximum particulate matter reduction, as well as a reduction in nitrogen oxides whenever possible and practicable.

All diesel powered non-road equipment 50 horsepower or greater must use a diesel particulate filter (DPF) or Tier IV device as verified by the Environmental Protection Agency (EPA) or California Air Resources Board (CARB).

DEP focused outreach efforts on the agency that has the most leased and rental vehicles within the city, the Department of Design and Construction (DDC). The greatest achievement in the reduction of pollutants occurred during July 2013 to date, better results than within the last decade. Rental companies also took advantage and replaced many of their older rental equipment with newer equipment that provide the most emission reduction benefits. To show the progress, it is important to note that from the beginning of this Local Law, 2003, the DDC had retrofitted until FY 2013, 169, and then from FY 2013 to date, 151 pieces of equipment are retrofitted or are Tier IV at 115 registered construction sites.

A staff of primarily three people is responsible for implementing this law which includes rulemaking, inspections, record keeping and requests for waivers when there are issues like repower, rebuild, or repair. The same staff also reviews the retrofit device to ensure that the right diesel emission control system, primarily DPF's or DOC's are used on the appropriate engine. The failure by the contractor to implement the prescribed controls, comprises a lot of the enforcement action that DEP must take. The costs associated with ensuring that this important law is complied with are the salaries of the individuals associated with the project.

• Describe actions taken to reduce diesel emissions.

As more non-road technology became verified by EPA and CARB for non-road use in 2013, DEP has increased inspections, made sure contractors and retrofit installers were aware of the improvements to the available retrofit technology use only best strategy to reduce diesel particulate matter emissions by 85 percent. DEP also made sure that agencies enforced the penalty clauses that are attached to the law, by drafting letters for the agencies to use in their contracts. DEP has written to the Department of Design and Construction (DDC), an agency that has many infrastructure contracts. DEP wrote to the DDC to have them send letters to all contractors who work on city projects to remind all construction companies to have best available controls on each piece of equipment, or these companies will typically be held liable for a \$15,000 payment deduction per piece of equipment not in compliance.

In every site visit, all project managers and contractor personnel are provided the necessary information, guidance and encouragement to find the right verified retrofit device for their engine using EPA and CARB websites. This aggressive effort brought many machines in compliance in a short period of time.

Describe business benefits and/or leverage associated with the project.

With increased compliance comes less reports of complaints from citizens from equipment that are emitting fumes and odors at construction site, which reduces the number of complaints. Ensures that businesses are using the cleanest possible equipment as contractors do not want to face stiff penalties that can result in a penalty in the amount between \$1,000 and \$10,000 in addition to twice the amount of money saved by the contractor by not using BAT.

• Describe how the project serves as a model for others to follow.

Implementation and Enforcement of Local Law 77 has achieved a great success and it has served as a model for other States and private entities including Westchester County, Pittsburgh Pennsylvania and Columbia University. These states have requested assistance in terms of rulemaking, how DEP monitors compliance and the types of forms and record keeping used.

Describe how actions can be continued and sustained.

Our effort still continues and we have enforced the same procedures in all New York City construction projects. As per the reporting requirements in Local Law 77 which has no end date, we strive to make sure that the best technology is used and to continue monitoring these projects to bring more emissions benefits to the New York City.

If applicable, list project partners and describe the partnership or collaborative effort.

In this effort we have great support from all New York City agencies. As per the requirement in the law, this law also applies to city agencies. Therefore, DEP works with all sister agencies to makes sure nonroad equipment have been retrofitted or replaced with newer equipment.

• If applicable, include quantified emission reductions (e.g., PM, HC, NOx, CO, fuel conserved)

Average PM emission percentage reduction per each vehicle that was retrofitted or equipped with Tier IV since Fiscal Year 2013 till date is 77.8% compared to just 21.55% before FY 13, resulting in a 56.23% PM reduction. By working with industry and creating a rule that allows Tier IV, industry then purchased these cleaner Tier IV vehicles. A vehicle equipped with a Tier IV engine emits only 0.32 tons per vehicle and 0.72 tons per vehicle when equipped with a DPF. Prior to FY 2013, vehicles emitted 7.24 tons of PM a year using a DPF and a Tier III engine.

• If applicable, include a qualitative description of the approach to outreach and collaboration

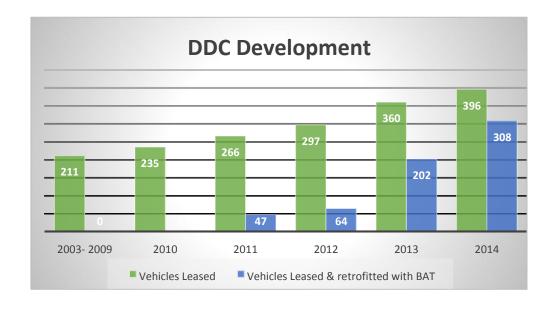
We created a Standard Operating Procedure (SOP) including official departmental forms to accumulate all necessary and important information regarding diesel equipment and engines. This SOP was distributed to agencies for their construction site managers to follow. One of the requirements of the SOP is to have compliance decals affixed on the equipment. Outreach was also part of the site visit to educate and encourage contractors regarding LL 77 requirements and how to choose the right device for their machines.

DDC	Vehicles Leased	Vehicles Leased & retrofitted with BAT
FY		Tetrofitted with BAT
2003- 2009	211	0
2010	235	0
2011	266	47
2012	297	64
2013	360	202
2014	396	308

Vehicles retorfitted since FY 2013 till date	77.78%
Vehicles retorfitted before FY 2013	21.55%

PM Reduction	
Rate	56.23%

All non-road equipment are retrofitted with DPF's or are Tier IV.





LOCAL LAW 77 COMPLIANCE DECAL

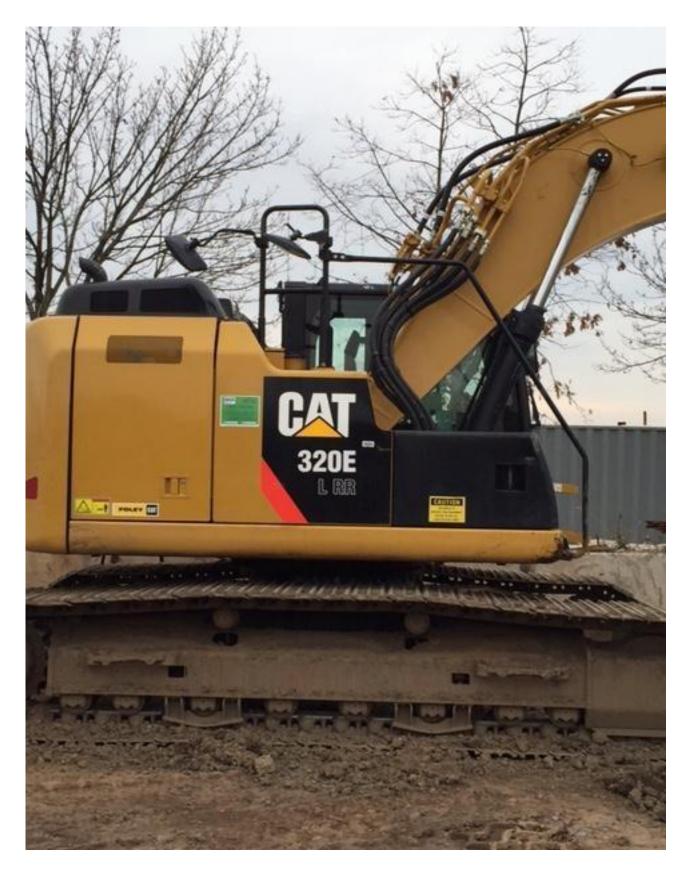






LOCAL LAW 77 COMPLIANT EQUIPMENT





LOCAL LAW 77 COMPLIANT EQUIPMENT